

1 40735/JEC/D465

SYSTEM AND METHOD FOR CREATING COMPOSITE IMAGES OF A
GEOGRAPHIC LOCATION

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ABSTRACT OF THE DISCLOSURE

A system and method synthesizing images of a locale to
generate a composite image that provide a panoramic view of the
locale. A video camera moves along a street recording images
10 of objects along the street. A GPS receiver and inertial
navigation system provide the position of the camera as the
images are being recorded. The images are indexed with the
position data provided by the GPS receiver and inertial
navigation system. The composite image is created on a column-
15 by-column basis by determining which of the acquired images
contains the desired pixel column, extracting the pixels
associated with the column, and stacking the columns side by
side. The composite images are stored in an image database and
20 associated with a street name and number range of the street
being depicted in the image. The image database covers a
substantial amount of a geographic area allowing a user to
visually navigate the area from a user terminal.

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